

## **PLAN VIEW**

### INDUCTION LOOP / PIEZO AXLE SENSOR **NUMBER IDENTIFICATION**

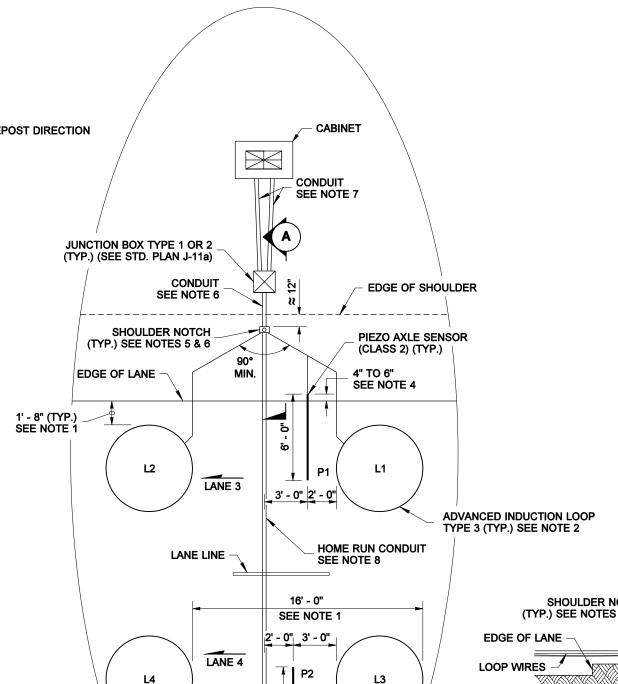
Lane 1 - (drive lane) ~ Loop L1, Piezo P1, Loop L2

Lane 2 - (pass lane) ~ Loop L3, Piezo P2, Loop L4

Lane 3 - (drive lane) ~ Loop L1, Piezo P1, Loop L2

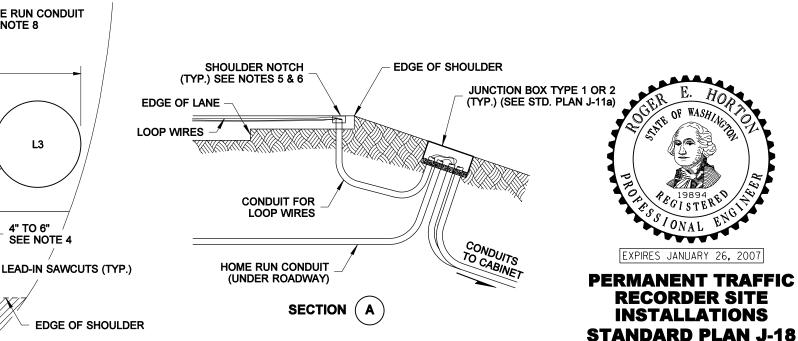
Lane 4 - (pass lane) ~ Loop L3, Piezo P2, Loop L4

# **TYPICAL 4 LANE FREEWAY WITH MEDIAN**



#### **NOTES**

- 1. The Traffic Data Collection Loop spacing shall be 16' 0" from leading edge to leading edge. The loops shall be centered inside lanes without an adjacent shoulder; the loops in lanes adjacent to shoulders, including the median shoulder, shall be located 1' - 8" from the edge of lane, see Detail "A".
- 2. Type 2 Advanced Induction Loops may also be used, see Standard Plan J-8b.
- 3. The loops and axle sensors shall be cut in the final lift of asphalt.
- 4. For concrete pavement lanes with asphalt shoulders, install all of the Piezo sensor and splice in the concrete lane. Also for concrete pavement lanes install the loops 4" to 6" away from the expansion joints.
- 5. The shoulder notch length along the roadway shall be 4" or the conduit size plus 2", whichever is larger. The shoulder notch width perpendicular to the roadway shall be the conduit size plus 1/4".
- 6. After all the wire leads are installed, seal the end of the conduit with Conduit Sealant. See the Special Provisions in the contract for the material used to fill the notch in the shoulder, or use an asphalt cold-patch.
- 7. Use Schedule 40 PVC conduit from the junction box to the cabinet. When there are four or more total lanes, use one conduit for each direction of travel. For conduit installation, see Standard Specification 8-20.
- 8. Use Schedule 80 PVC, HDPE, or Steel Conduit under the roadway. For conduit installation, see Standard Specification 8-20.
- 9. An inspector from the Traffic Data Office (TDO) shall be on site during all phases of the Traffic Recorder installation. The Contractor shall alert the Engineer 10 days prior to the beginning of any installation activity.
- 10. See Standard Plan J-20 for Piezo Axle Sensor General Installation Instructions.



**SHEET 1 OF 2 SHEETS** 

APPROVED FOR PUBLICATION

Harold J. Peterfeso

09-02-05

**DETAIL "A"** 

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4" TO 6"

**SEE NOTE 4** 

1' - 8" (TYP.)

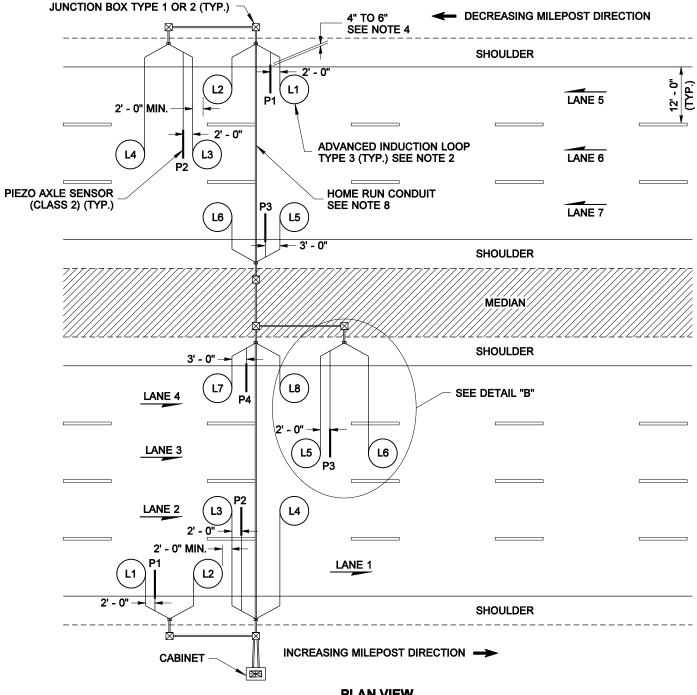
SEE NOTE 1

**EDGE OF LANE** 

**MEDIAN** 

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE.
THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON FILE
AT THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED





### **PLAN VIEW**

### **INDUCTION LOOP / PIEZO AXLE SENSOR NUMBER IDENTIFICATION**

Lane 1 - (drive lane) ~ Loop L1, Piezo P1, Loop L2

Lane 2 - (drive lane) ~ Loop L3, Piezo P2, Loop L4

Lane 3 - (drive lane) ~ Loop L5, Piezo P3, Loop L6

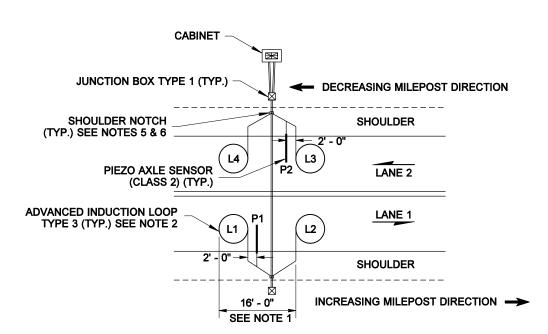
Lane 4 - (pass lane) ~ Loop L7, Piezo P4, Loop L8

Lane 5 - (drive lane) ~ Loop L1, Piezo P1, Loop L2

Lane 6 - (drive lane) ~ Loop L3, Piezo P2, Loop L4

Lane 7 - (pass lane) ~ Loop L5, Piezo P3, Loop L6

## **TYPICAL 7 LANE FREEWAY WITH MEDIAN**



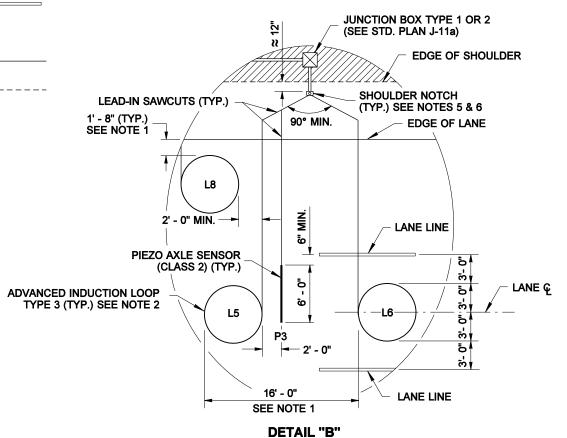
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Lane 1 - (drive lane) ~ Loop L1, Piezo P1, Loop L2

Lane 2 - (drive lane) ~ Loop L3, Piezo P2, Loop L4

#### **TYPICAL 2 WAY ROADWAY**





# PERMANENT TRAFFIC **RECORDER SITE INSTALLATIONS STANDARD PLAN J-18**

**SHEET 2 OF 2 SHEETS** 

